Editorial

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What to call arrhythmias?

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The problem of definition of disorders of cardiac rhythm and conduction has received fresh consideration largely because of advances in electrophysiological techniques. Recently, two bodies have tried to clarify terminology, and their proceedings have been published in close succession. The American College of Cardiology (Tenth Bethesda Conference, 1978) held a meeting on 'Optimal Electrocardiography' in 1977, during which many other aspects of electrocardiography were also discussed. Task Force I, one of the committees that met during this conference, was devoted to standardisation of terminology and interpretation. Parallel with this American venture, a committee set up by the World Health Organisation and the International Society of Cardiology has also considered definitions of terms related to cardiac rhythm (WHO/ISC Task Force, 1978). Both groups explain why some terms are to be preferred and others discouraged; as the introduction to the international report stresses, the motivation is 'the need for common language in electrocardiology.'

At once we are confronted with a recurrent problem; what overall term should be used to describe disorders of rhythm and conduction? In keeping with the reasoned exposition by Papp (1969), both of the present reports unhesitatingly select 'arrhythmia'. 'Dysrhythmia' is a more recent neologism, for which there is no good justification. It is used, by its exponents, to mean 'absence of physiological rhythm', the sense in which 'arrhythmia' has been used for more than 100 years (Scherf and Schott, 1953). The WHO/ISC Task Force defines arrhythmia as 'any cardiac rhythm other than normal sinus rhythm. Such a rhythm may be either of sinus or ectopic origin, and either regular or irregular. An arrhythmia may be due to a disturbance in impulse formation or conduction, or both.' Thus those who attempt to introduce 'dysrhythmia' merely compound confusion, especially when, as one tends to see more often—though not exclusively—in general than in cardiac journals, the words 'arrhythmia' and 'dysrhythmia' appear synonymously in the same article. 'Arrhythmia' conforms with classic Greek usage; as Papp said nearly 10 years ago, 'the pioneers of cardiac arrhythmias had as good or better classical knowledge as many of us.' Here and elsewhere we should heed his advice not to sacrifice international understanding to 'false linguistic purism'.

Fortunately the terms preferred by the two recent 'task forces' are compatible, but they deserve careful consideration. What is the justification for rules? Are we being too rigid in asking ourselves to stick to them? Those who use indexes, not to mention the hardworking compilers, must not be frustrated because of unnecessary synonyms and the corollary that even with careful scrutiny an important subject may be missed because it is listed according to the individual whim of an author. To this extent we must accept discipline, so that we can communicate successfully with one another. Anatomically it should be easiest to be precise but there has been much confusion and semantic difficulty. With this has gone uncertainty about the criteria for interpretation of electrocardiographic appearances said to reflect a variety of disorders of rhythm and conduction. Recent collaborative work has clarified the anatomy of the conducting tissues and provided useful definitions—and, incidentally, confirmed many early descriptions (Anderson and Becker, 1978).

Coming back to electrocardiography, as computer-aided interpretation becomes more widely used, the development of a proper data base requires consistency of language. As a result of the Tenth Bethesda Conference, an ad hoc committee of the American College of Cardiology and the American Heart Association is planned, so as to ensure coordination. The WHO/ISC Task Force will shortly publish a classification of cardiac arrhythmias and conduction disturbances based on the

original definitions, which can be used or adapted for storage and retrieval of electrocardiographic data.

It is at this stage that some of the difficulties in enforcing changed usage become apparent. We will not stop saying 'sinus arrhythmia' even though this may be scientifically unsatisfactory: nor is a good substitute proposed. Newer friends that captured attention as soon as they appeared, for example 'hemiblock', are also likely to be with us for some time, and to be used more widely than long-winded substitutes containing more precise anatomical descriptions, especially as the correlation between lesions affecting the ramifications of the left bundle-branch system and frontal plane axis deviation on the electrocardiogram still remains uncertain.

There is some consolation, at least, for those who find difficulty with the multitude of definitions and electrocardiographic terms that have become relevant since the advent of intracardiac electrophysiological studies. Here the WHO/ISC definitions are particularly useful, containing descriptions of such difficult matters as refractory periods and types of atrioventricular block, with a helpful diagram to clarify the former. Some may argue that the committee should have defined 'normal' and 'abnormal' in absolute terms, but it deliberately did not do so, explaining that quantitative data can vary for all sorts of reasons, ranging from the age of the patient to the type of equipment used; in some respects the data for such precise definitions are still incomplete.

It is interesting that simultaneous and independent needs were expressed in the United States and in Europe, for it was a joint initiative by the Dutch Heart Foundation and the World Health Organization that led to the formation of the WHO/ISC Task Force. English was the basic working language, and it is in English that the original report has appeared though translations are anticipated in the mother tongues of a number of national journals. Without the collaboration of colleagues with sound personal knowledge of the other European languages, the historical context and accuracy on which this report rests would have been missing. Time—and continued dialogue—will be the test; definitions and classifications can only succeed if they prove themselves in practice.

References

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